

### **REMARKS**

Applicant notes with appreciation the opportunity to discuss the status of the application telephonically with the Examiner on June 8, 2005. With entry of this amendment claims 54, and 56-63 are pending in the application. Of these pending claims, claims 54, 56, and 57 are in independent form. The Examiner has identified claims 54 and 56 as being allowable. The Examiner's permission to add new claims 57-63 during the discussion of June 8, 2005 is noted with appreciation. Support for the claims amendments and new claims 57-63 is found in the application as filed and as such no new matter is submitted to have been entered by way of this amendment. Claims 54 and 56-63 are the claims currently pending.

New claims 57-63 have been added to reflect the Examiner's suggested directions to address the enablement of claim 1 under 35 U.S.C. §112, first paragraph as set forth in the outstanding Office Action. The Examiner has identified four E. coli purine nucleoside phosphorylase mutants described in the present specification as "functional" and states that "only the M65V, A157L, A157V and E180D have PNP activity that is significantly higher than the negative control." (February 10, 2005 Office Action, p. 8) Applicant notes that even by this criterion, more than four of the disclosed mutants are "functional." For example, Table II shows M65A is "functional" according to this definition.

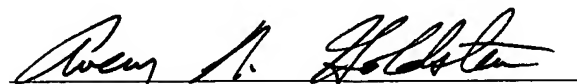
Further, Table I shows that the mutant M65A has nearly twice the activity seen in a negative control (0.8 control vs 1.5 M65A), and the mutant D205N likewise has greater activity than that of a negative control (0.8 control vs 2.2 D205N). Applicant believes these results are functionally significant. However, claims to mutant D205N may be pursued in later filings.

The Examiner states that "[t]he specific mutant E. coli PNPs that are enabled by the specification are the E. coli M65V, A157L, A157V and E180D mutants. Amending the pending claims such that they are limited to these specific E. coli PNP mutations would obviate the instant rejection." (February 10, 2005 Office Action, p. 8). As noted above, Applicant hereby cancels claims 1, 2, 6, 7, and 9-33 and submits new claims 57-63 directed to the subset of mutants identified by the Examiner. In addition, Applicant has included the M65A mutant in the new claims. Entry and allowance of claims 57-63 is solicited.

**Summary**

Upon entry of this amendment, claims 54 and 56-63 are pending. Claims 54 and 56 have previously been noted to be allowable. It is submitted that the present amendment adding claims 57-63 merely adopts Examiner suggestions and therefore entry and allowance as to claims 57-63 is solicited. Each claim is believed to be in proper form and directed to allowable and patentable subject matter. Should the Examiner find to the contrary, it is respectfully requested that the undersigned attorney be contacted.

Respectfully submitted,



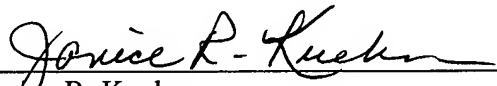
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Janice R. Kuehn